

What is claimed is:

1. An electronic checkout system comprising:

1 (a) a tool box located in a tool storage room;

2 (b a plurality of tools stored in said tool box, each of  
3 said plurality of tools having a tool identification means  
4 imbedded therein, said tool identification means for each  
5 of said tools providing a radio frequency signal  
6 containing a digital tool identification code which  
7 operates as an identifier for each of said tools;

8 (c) first reader means mounted on said tool box, said  
9 first reader means being adapted to receive and read the  
10 radio frequency signal provided by each of said tools to  
11 determine when each of said tools is being removed from  
12 said tool box by an authorized user, said first reader  
13 means reading the radio frequency signal provided by each  
14 of said tools and recording the digital tool  
15 identification code for each of said tools which said  
16 authorized user removed from said tool box;

17 (d) second reader means mounted on a wall adjacent an  
18 exit to said tool storage room, said second reader means  
19 being adapted to receive and read the radio frequency  
20 signal for each of said tools to determine when each of  
21 said tools is being removed from said tool storage room by

22 said authorized user, said second reader means reading the  
23 radio frequency signal provided by each of said tools and  
24 recording the digital tool identification code for each of  
25 said tools which said authorized user removed from said  
26 tool storage room;

27 (e) an employee identification badge having an employee  
28 identification means imbedded therein, said employee  
29 identification badge being worn by said authorized user to  
30 identify said user as an individual authorized to remove  
31 each of said tools from said tool box and said tool  
32 storage room, the employee identification means for said  
33 employee identification badge providing a radio frequency  
34 signal containing a digital employee identification code  
35 for said authorized user; and

36 (f) said first reader means and said second reader means  
37 reading the digital employee identification code for said  
38 employee identification badge to determine when the  
39 individual removing any one of said tools from said tool  
40 box and said tool storage room is said authorized user.

1 2. The electronic checkout system of claim 1 wherein the tool  
2 identification means for each of said tools and the employee  
3 identification means for said employee identification badge

4 operate at a frequency of 13.56 MHz and provides for read  
5 distances of approximately five feet.

1 3. The electronic checkout system of claim 1 wherein the tool  
2 identification means for each of said tools and the employee  
3 identification means for said employee identification badge  
4 operate at a frequency of 2.46 GHz and provides for read  
5 distances of approximately ten feet.

1 4. The electronic checkout system of claim 1 wherein said  
2 second reader means includes a recorder connected thereto, said  
3 recorder recording the digital tool identification code for  
4 each of said tools which has been removed from said tool  
5 storage room by said authorized user.

1 5. The electronic checkout system of claim 1 wherein said  
2 second reader means includes an alarm which is activated  
3 whenever an unauthorized individual removes one tool of said  
4 plurality of tools from said tool storage room.

1 6. The electronic checkout system of claim 1 further comprising  
2 a wrist band worn by said authorized user, said wrist band  
3 having employee identification means imbedded therein, said

4 wrist band badge being worn by said authorized user to identify  
5 said user as the individual authorized to remove each of said  
6 tools from said tool box and said tool storage room, the  
7 employee identification means for said wrist band providing a  
8 radio frequency signal containing said digital employee  
9 identification code for said authorized user.

1 7. The electronic checkout system of claim 1 wherein said  
2 plurality of tools stored in said tool box comprises screw  
3 drivers, pliers, wrenches, metal cutting saws, wire strippers  
4 wire cutters, electric drills, electric bandsaws, and specialty  
5 tools.

1 8. An electronic checkout system comprising:  
2 (a) a tool box located in a tool storage room;  
3 (b) a plurality of tools stored in said tool box, each of  
4 said plurality of tools having a radio frequency  
5 identification (RFID) device imbedded therein, said radio  
6 frequency identification device for each of said tools  
7 operating as an identifier for each of said tools;  
8 (c) a first RFID reader mounted on said tool box, said  
9 first RFID reader being adapted to read the radio

10 frequency identification device for each of said tools to  
11 determine when each of said tools is being removed from  
12 said tool box by an authorized user, said first RFID  
13 reader reading and recording the radio frequency  
14 identification device for each of said tools which said  
15 authorized user removed from said tool box;

16 (d) a second RFID reader mounted on a wall adjacent an  
17 exit to said tool storage room, said second RFID reader  
18 being adapted to read the radio frequency identification  
19 device for each of said tools to determine when each of  
20 said tools is being removed from said tool storage room by  
21 said authorized user, said second RFID reader reading and  
22 recording the radio frequency identification device for  
23 each of said tools which has been removed from said tool  
24 storage room by said authorized user;

25 (e) an employee identification badge having a radio  
26 frequency identification device imbedded therein, said  
27 employee identification badge being worn by said  
28 authorized user to identify said user as an individual  
29 authorized to remove each of said tools from said tool box  
30 and said tool storage room; and

31 (f) said first RFID reader and said second RFID reader  
32 reading the radio frequency identification device for said

33 employee identification badge to determine when the  
34 individual removing any one of said tools from said tool  
35 box and said tool storage room is said authorized user.

1 9. The electronic checkout system of claim 8 wherein the radio  
2 frequency identification device for each of said tools and the  
3 radio frequency identification device for said employee  
4 identification badge operate at a frequency of 13.56 MHz and  
5 provides for read distances of approximately five feet.

1 10. The electronic checkout system of claim 8 wherein the radio  
2 frequency identification device for each of said tools and the  
3 radio frequency identification device for said employee  
4 identification badge operate at a frequency of 2.46 GHz and  
5 provides for read distances of approximately ten feet.

1 11. The electronic checkout system of claim 8 wherein said  
2 second RFID reader includes a recorder connected thereto, said  
3 recorder recording the radio frequency identification device  
4 for each of said tools which has been removed from said tool  
5 storage room by said authorized user.

1 12. The electronic checkout system of claim 8 wherein said

2 second RFID reader includes an alarm which is activated  
3 whenever an unauthorized individual removes one tool of said  
4 plurality of tools from said tool storage room.

1 13. The electronic checkout system of claim 8 further  
2 comprising a wrist band worn by said authorized user, said  
3 wrist band having a radio frequency identification device  
4 imbedded therein, said wrist band badge being worn by said  
5 authorized user to identify said user as the individual  
6 authorized to remove each of said tools from said tool box and  
7 said tool storage room.

1 14. The electronic checkout system of claim 8 wherein said  
2 first RFID reader has a sensor element, a keypad and a display  
3 wherein said sensor element is adapted to receive radio  
4 frequency signals transmitted by the radio frequency  
5 identification device for each of said tools, said keypad  
6 allows said authorized user to enter additional information  
7 into said first RFID reader relating to each of said tools said  
8 authorized user removes from said tool box, and said display  
9 allows said authorized user to read said additional information  
10 the authorized user entered into said first RFID reader.

1 15. The electronic checkout system of claim 8 wherein said  
2 second RFID reader has a sensor element, a keypad and a display  
3 wherein said sensor element is adapted to receive radio  
4 frequency signals transmitted by the radio frequency  
5 identification device for each of said tools, said keypad  
6 allows said authorized user to enter additional information  
7 into said second RFID reader relating to each of said tools  
8 said authorized user removes from said tool storage room, and  
9 said display allows said authorized user to read said  
10 additional information the authorized user entered into said  
11 second RFID reader.

1 16. The electronic checkout system of claim 8 wherein said  
2 plurality of tools stored in said tool box comprises screw  
3 drivers, pliers, wrenches, metal cutting saws, wire strippers  
4 wire cutters, electric drills, electric bandsaws, and specialty  
5 tools.

1 17. The electronic checkout system of claim 8 further  
2 comprising:

3 (a) a wireless link having an antenna, said wireless link being  
4 connected to a network which includes said second RFID reader  
5 adjacent the exit to said tool storage room;



6 (b) a remote toolbox which transmits information via radio  
7 frequency signals to the antenna of said wireless link relating  
8 to portable tools removed from said remote tool box by said  
9 authorized user; and

10 (c) a database connected to said network, said database  
11 including a list of employees authorized to remove said  
12 portable tools from said remote toolbox and to remove said  
13 tools from said tool box located in said tool storage room.

1 18. The electronic checkout system of claim 17 further  
2 comprising at least one additional tool box located in said  
3 tool storage room.

1 19. An electronic checkout system comprising:

2 (a) a tool box located in a tool storage room;

3 (b) a plurality of tools stored in said tool box, each of  
4 said plurality of tools having a tool identification  
5 device imbedded therein, said tool identification device  
6 for each of said tools providing a radio frequency signal  
7 containing a digital tool identification code which  
8 operates as an identifier for each of said tools;

9 (c) a first RFID reader mounted on said tool box, said  
10 first RFID reader being adapted to receive and read the

11 radio frequency signal provided by each of said tools to  
12 determine when each of said tools is being removed from  
13 said tool box by an authorized user, said first RFID  
14 reader reading the radio frequency signal provided by each  
15 of said tools and recording the digital tool  
16 identification code for each of said tools which said  
17 authorized user removed from said tool box;

18 (d) second RFID reader mounted on a wall adjacent an  
19 exit to said tool storage room, said second RFID reader  
20 being adapted to receive and read the radio frequency  
21 signal for each of said tools to determine when each of  
22 said tools is being removed from said tool storage room by  
23 said authorized user, said second RFID reader reading the  
24 radio frequency signal provided by each of said tools and  
25 recording the digital tool identification code for each of  
26 said tools which said authorized user removed from said  
27 tool storage room;

28 (e) an employee identification badge having an employee  
29 identification device imbedded therein, said employee  
30 identification badge being worn by said authorized user to  
31 identify said user as an individual authorized to remove  
32 each of said tools from said tool box and said tool  
33 storage room, the employee identification device for said

34 employee identification badge providing a radio frequency  
35 signal containing a digital employee identification code  
36 for said authorized user;

37 (f) said first RFID reader and said second RFID reader  
38 reading the digital employee identification code for said  
39 employee identification badge to determine when the  
40 individual removing any one of said tools from said tool  
41 box and said tool storage room is said authorized user;

42 and

43 (g) said tool identification device for each of said tools  
44 and said employee identification device for said employee  
45 identification badge each comprising a radio frequency  
46 identification device selected from the group of radio  
47 frequency identification devices consisting of (a) a first  
48 RFID device operating at a frequency of 13.56 MHz and  
49 providing for read distances of approximately five feet,  
50 and (b) a second RFID device operating at a frequency of  
51 2.46 GHz and providing for read distances of approximately  
52 ten feet.

1 20. The electronic checkout system of claim 19 further  
2 comprising a wrist band worn by said authorized user, said  
3 wrist band having a radio frequency identification device

4 imbedded therein, said wrist band badge being worn by said  
5 authorized user to identify said user as the individual  
6 authorized to remove each of said tools from said tool box and  
7 said tool storage room.